

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L3	1	(opacit\$3 and boundar\$3 and pixel and (winding near3 count)).CLM.	US-PGPUB	OR	ON	2006/03/03 11:03
L2	1	(opacit\$3 and boundar\$3 and pixel and (winding near3 count)).CLM.	US-PGPUB	OR	OFF	2006/03/03 11:03
L1	2	"5231695".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/03/03 11:02
S12 8	1	S127 and (winding adj count\$1)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/03/03 11:01
S12 7	167	S125 and opacity	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/03/03 09:59
S82	146	S80 and opacity	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/03/03 09:59
S12 6	0	S125 and "345"/\$.ccls	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/03/03 09:58
S12 5	5556	"(1-alpha)"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/03/03 09:58
S12 4	4	((scan adj conversion) and (alpha)) and (winding adj count\$1)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/03 09:58
S81	0	S80 and "345"/\$.ccls	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/03/03 09:58
S31	3	((scan adj conversion) and (alpha)) and (winding adj count)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/03 09:58

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S12 3	46	345/611.ccls. and ((opacity or transparen\$3) same (pixel and (object or character or polygon)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/03/03 09:56
S12 2	16	345/611.ccls. and ((opacity or transparen\$3) same boundar\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/03/03 09:56
S10 3	46	345/611.ccls. and ((opacity or transparen\$3) same (pixel and (object or character or polygon)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/03/03 09:56
S10 2	16	345/611.ccls. and ((opacity or transparen\$3) same boundar\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/03/03 09:56
S12 1	8	"winding count" same opacity	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/03/03 09:55
S12 0	4	345/592.ccls. and (total near3 opacity)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/03/03 09:54
S11 9	2	"winding count" near7 (multipl\$5)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/03/03 09:54
S11 8	1	"winding count" near7 opacity	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/03/03 09:54
S11 7	7	"intrinsic opacity"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/03 09:54
S11 6	1	382/199.ccls. and ((transpar\$4 or opac\$3) near7 pixel) same boundar\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/03 09:54

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S11 5	0	382/199.ccls. and (opacity or transparen\$3 or translucen\$3) and (winding adj count)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/03 09:54
S10 1	2	"winding count" near7 (multipl\$5)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/03/03 09:54
S10 0	1	"winding count" near7 opacity	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/03/03 09:54
S99	7	"intrinsic opacity"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/03 09:54
S98	4	345/592.ccls. and (total near3 opacity)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/03/03 09:54
S97	1	382/199.ccls. and ((transpar\$4 or opac\$3) near7 pixel) same boundar\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/03 09:54
S96	0	382/199.ccls. and (opacity or transparen\$3 or translucen\$3) and (winding adj count)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/03/03 09:54
S11 4	116	winding adj count\$1	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/03 09:04
S95	114	winding adj counts	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/03 09:04
S11 3	210	345/592.ccls.	US-PGPUB; USPAT; DERWENT	OR	ON	2006/03/03 08:29
S11 2	0	345/441.ccls. and (instrinsic near5 (transpar\$4 or opac\$3))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/03 08:29

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S11 1	6	345/441.ccls. and ((transpar\$4 or opac\$3) near7 pixel) same boundar\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/03 08:29
S11 0	0	345/629.ccls. and (intrinsic near5 (transpar\$4 or opac\$3))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/03 08:29
S94	195	345/592.ccls.	US-PGPUB; USPAT; DERWENT	OR	ON	2006/03/03 08:29
S93	6	345/441.ccls. and ((transpar\$4 or opac\$3) near7 pixel) same boundar\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/03 08:29
S92	0	345/629.ccls. and (intrinsic near5 (transpar\$4 or opac\$3))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/03 08:29
S10 9	16	345/629.ccls. and ((transpar\$4 or opac\$3) near7 pixel) same boundar\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/03 08:27
S10 8	0	345/470.ccls. and ("real opacity")	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/03 08:27
S10 7	0	345/470.ccls. and ("winding count")	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/03 08:27
S91	11	345/629.ccls. and ((transpar\$4 or opac\$3) near7 pixel) same boundar\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/03 08:27
S10 6	53	345/470.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/03 08:26
S10 5	4	doan-Khanh-phi-van.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/03 08:08
S10 4	2	doan-Khanh.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/03 08:08

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S90	50	345/470.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/03 08:08
S89	4	doan-Khanh-phi-van.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/03 08:08
S88	2	doan-Khanh.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/03/03 08:08
S84	39	345/611.ccls. and ((opacity or transparen\$3) same (pixel and (object or character or polygon)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/10/31 14:58
S83	14	345/611.ccls. and ((opacity or transparen\$3) same boundar\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/10/31 14:58
S71	2	"winding count" near7 (multipl\$5)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/10/31 14:58
S73	3	345/592.ccls. and (total near3 opacity)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/10/31 14:57
S72	1	"winding count" near7 opacity	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/10/31 14:57
S70	7	"intrinsic opacity"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/10/31 14:57
S67	1	382/199.ccls. and ((transpar\$4 or opac\$3) near7 pixel) same boundar\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/10/31 14:57
S66	0	382/199.ccls. and (opacity or transparen\$3 or translucen\$3) and (winding adj count)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/10/31 14:57

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S56	105	winding adj counts	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/10/31 14:56
S54	5	345/441.ccls. and ((transpar\$4 or opac\$3) near7 pixel) same boundar\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/10/31 14:55
S52	0	345/629.ccls. and (intrinsic near5 (transpar\$4 or opac\$3))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/10/31 14:55
S49	177	345/592.ccls.	US-PGPUB; USPAT; DERWENT	OR	ON	2005/10/31 14:55
S51	10	345/629.ccls. and ((transpar\$4 or opac\$3) near7 pixel) same boundar\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/10/31 14:39
S12	41	345/470.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/10/31 13:48
S2	1	doan-Khanh-phi-van.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/10/31 13:48
S1	1	doan-Khanh.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/10/31 13:48
S87	285	S86 and pixel	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/05/03 10:01
S86	2766	(alpha or opacity) near3 (character)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/05/03 10:01
S85	1	(overall near3 opacity) near5 (object or polygon or character)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/05/03 10:01

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S80	4821	"(1-alpha)"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/05/03 09:45
S79	16974	"(1-a)"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/05/03 09:45
S78	7	(total near3 alpha) near3 (object or character or polygon)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/05/03 09:45
S75	2	(total near3 opacity) near5 object	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/05/03 09:43
S77	0	(total near3 opacity) near5 (character)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/05/03 09:30
S76	0	(total near3 opacity) near5 (polygon)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/05/03 09:30
S74	0	(total near3 opacity) near7 minus	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/05/03 09:30
S69	3	(boundary near5 pixel) and ("real opacity" or "intrinsic opacity")	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/03 08:44
S68	0	382/199.ccls. and (winding adj count)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/03 08:42
S35	0	382/199.ccls. and (winding adj count)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/03 08:42

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S65	1	345/441.ccls. and (opacity or transparen\$3 or translucen\$3) and (winding adj count)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/05/03 08:41
S64	1	345/592.ccls. and (opacity or transparen\$3 or translucen\$3) and (winding adj count)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/05/03 08:41
S63	2	345/629.ccls. and (opacity or transparen\$3 or translucen\$3) and (winding adj count)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/05/03 08:41
S23	2	345/629.ccls. and (opacity or transparen\$3 or translucen\$3) and (winding adj count)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/05/03 08:40
S62	34	345/629.ccls. and (scan adj conver\$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/03 08:36
S61	77	345/441.ccls. and (scan adj conver\$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/03 08:36
S60	13	345/592.ccls. and (scan adj conver\$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/03 08:36
S59	0	345/629.ccls. and (scan adj conver)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/03 08:36
S58	0	345/441.ccls. and (scan adj conver)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/03 08:36
S57	0	345/592.ccls. and (scan adj conver)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/03 08:35
S17	0	345/592.ccls. and (scan adj conver)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/03 08:35
S13	98	winding adj counts	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/03 08:34

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S55	48	345/470.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/03 08:28
S53	897	345/441.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/03 08:23
S10	839	345/441.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/03 08:17
S48	891	345/629.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/05/03 08:02
S16	156	345/592.ccls.	US-PGPUB; USPAT; DERWENT	OR	ON	2005/05/03 08:02
S9	791	345/629.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2005/05/03 08:02
S47	3	doan-Khanh-phi-van.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/03 08:01
S46	2	doan-Khanh.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2005/05/03 08:01
S39	0	((US-6084596-\$ or US-5428744-\$ or US-5493640-\$ or US-5371843-\$ or US-5073960-\$ or US-5043711-\$ or US-6437793-\$ or US-5065342-\$ or US-5450534-\$ or US-5438656-\$ or US-6614447-\$ or US-5499323-\$ or US-5471568-\$).did.) and (constant near7 wind\$3)	US-PGPUB; USPAT; DERWENT	OR	OFF	2004/09/15 09:39
S38	0	((US-6084596-\$ or US-5428744-\$ or US-5493640-\$ or US-5371843-\$ or US-5073960-\$ or US-5043711-\$ or US-6437793-\$ or US-5065342-\$ or US-5450534-\$ or US-5438656-\$ or US-6614447-\$ or US-5499323-\$ or US-5471568-\$).did.) and (constant near5 count)	US-PGPUB; USPAT; DERWENT	OR	OFF	2004/09/15 09:39

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S37	13	(US-6084596-\$ or US-5428744-\$ or US-5493640-\$ or US-5371843-\$ or US-5073960-\$ or US-5043711-\$ or US-6437793-\$ or US-5065342-\$ or US-5450534-\$ or US-5438656-\$ or US-6614447-\$ or US-5499323-\$ or US-5471568-\$).did.	USPAT	OR	OFF	2004/09/15 09:35
S36	2	382/199.ccls. and (opacity or transparen\$4 or translucen\$4) and (scan adj conver\$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/09/14 15:21
S11	1167	382/199.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/09/14 15:20
S34	94	((scan adj conversion) and (alpha)) and (scan near3 direction)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/09/14 15:15
S33	25	((scan adj conversion) and (alpha)) and (path near5 direction)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/09/14 15:14
S32	14	((scan adj conversion) and (alpha)) and (scan near3 path)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/09/14 15:12
S30	489	(scan adj conversion) and (alpha)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/09/14 15:11
S29	2	345/629.ccls. and (alpha) and (winding adj count)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/09/14 15:11
S19	142	(scan adj conversion) and (opacity or transparen or translucen)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/09/14 15:11
S28	1	((US-6084596-\$ or US-5428744-\$ or US-5493640-\$ or US-5043711-\$ or US-5371843-\$ or US-5073960-\$ or US-5450534-\$ or US-5438656-\$ or US-6437793-\$ or US-5065342-\$). did.) and (alpha)	US-PGPUB; USPAT; DERWENT	OR	ON	2004/09/14 15:10

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S22	2	((US-6084596-\$ or US-5428744-\$ or US-5493640-\$ or US-5043711-\$ or US-5371843-\$ or US-5073960-\$ or US-5450534-\$ or US-5438656-\$ or US-6437793-\$ or US-5065342-\$). did.) and (opacity or transparen\$3)	US-PGPUB; USPAT; DERWENT	OR	ON	2004/09/14 15:10
S27	13	345/592.ccls. and (scan adj conver\$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/09/14 15:09
S26	1	345/592.ccls. and (winding adj count)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/09/14 15:09
S25	24	345/441.ccls. and (opacity)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/09/14 15:08
S24	2	345/441.ccls. and (winding adj count)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/09/14 15:08
S21	47	345/441.ccls. and (scan adj conver\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/09/14 15:07
S20	2	345/629.ccls. and (winding adj count)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2004/09/14 15:06
S18	1	345/592.ccls. and (winding adj count)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/09/14 14:37
S15	10	(US-6084596-\$ or US-5428744-\$ or US-5493640-\$ or US-5043711-\$ or US-5371843-\$ or US-5073960-\$ or US-5450534-\$ or US-5438656-\$ or US-6437793-\$ or US-5065342-\$). did.	USPAT	OR	OFF	2004/09/14 13:10
S14	11	("4901251" "5043711" "5115402" "5231695" "5347619" "5361333" "5438656" "5450534" "5831622" "6034694" "6084596" "2003/0016221").PN.	USPAT	OR	OFF	2004/09/14 11:15
S5	2	"5493640".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/09/14 08:33

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S8	5	("4364037" "4554538" "4646076" "4677574" "4815009").PN.	USPAT	OR	OFF	2004/09/14 08:32
S7	7	("4763119" "4815009" "4998211" "5038385" "5043711" "5073960" "5371843").PN.	USPAT	OR	OFF	2004/09/14 08:30
S6	2	"4628359".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/09/14 08:28
S4	2	"5428744".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/09/14 08:26
S3	2	"6084596".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2004/09/14 08:25


Terms used [opacity](#) [winding](#) [pixel](#) [boundary](#)

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1 [The elements of nature: interactive and realistic techniques](#)



Oliver Deussen, David S. Ebert, Ron Fedkiw, F. Kenton Musgrave, Przemyslaw Prusinkiewicz, Doug Roble, Jos Stam, Jerry Tessendorf

August 2004 **Proceedings of the conference on SIGGRAPH 2004 course notes GRAPH '04**

Publisher: ACM Press

Full text available: [pdf\(17.65 MB\)](#) Additional Information: [full citation](#), [abstract](#)

This updated course on simulating natural phenomena will cover the latest research and production techniques for simulating most of the elements of nature. The presenters will provide movie production, interactive simulation, and research perspectives on the difficult task of photorealistic modeling, rendering, and animation of natural phenomena. The course offers a nice balance of the latest interactive graphics hardware-based simulation techniques and the latest physics-based simulation techni ...

2 [Level set and PDE methods for computer graphics](#)



David Breen, Ron Fedkiw, Ken Museth, Stanley Osher, Guillermo Sapiro, Ross Whitaker

August 2004 **Proceedings of the conference on SIGGRAPH 2004 course notes GRAPH '04**

Publisher: ACM Press

Full text available: [pdf\(17.07 MB\)](#) Additional Information: [full citation](#), [abstract](#)

Level set methods, an important class of partial differential equation (PDE) methods, define dynamic surfaces implicitly as the level set (iso-surface) of a sampled, evolving nD function. The course begins with preparatory material that introduces the concept of using partial differential equations to solve problems in computer graphics, geometric modeling and computer vision. This will include the structure and behavior of several different types of differential equations, e.g. the level set eq ...

3 [GPGPU: general purpose computation on graphics hardware](#)



David Luebke, Mark Harris, Jens Krüger, Tim Purcell, Naga Govindaraju, Ian Buck, Cliff Woolley, Aaron Lefohn

August 2004 **Proceedings of the conference on SIGGRAPH 2004 course notes GRAPH '04**

Publisher: ACM Press

Full text available: [pdf\(63.03 MB\)](#) Additional Information: [full citation](#), [abstract](#)

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4 [Particle animation and rendering using data parallel computation](#)

Karl Sims



Publisher: ACM Press

Full text available: pdf(5.82 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

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5 V-buffer: visible volume rendering



Craig Upson, Michael Keeler

June 1988 **ACM SIGGRAPH Computer Graphics , Proceedings of the 15th annual conference on Computer graphics and interactive techniques SIGGRAPH '88**, Volume 22 Issue 4

Publisher: ACM Press

Full text available: pdf(1.49 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

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Keywords: isosurface, natural phenomena, ray tracing, volume rendering, voxel

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Xiaoming Wei, Wei Li, Klaus Mueller, Arie Kaufman

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Nick Foster, Dimitris Metaxas

August 1997 **Proceedings of the 24th annual conference on Computer graphics and interactive techniques**

Publisher: ACM Press/Addison-Wesley Publishing Co.

Full text available: pdf(5.92 MB)

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Keywords: animation, convection, gas simulations, gaseous phenomena, physics-based modeling, smoke, steam, turbulent flow

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graphics hardware

Charles Loop, Jim Blinn

July 2005 **ACM Transactions on Graphics (TOG)**, Volume 24 Issue 3

Publisher: ACM Press

Full text available: [pdf\(440.87 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

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Publisher: IEEE Computer Society

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Publisher: IEEE Computer Society

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11 Photorealistic hair modeling, animation, and rendering



Nadia Magnenat-Thalmann

August 2004 **Proceedings of the conference on SIGGRAPH 2004 course notes GRAPH '04**

Publisher: ACM Press

Full text available: [pdf\(17.68 MB\)](#) Additional Information: [full citation](#)

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Christopher G. Healey, Laura Tateosian, James T. Enns, Mark Remple

January 2004 **ACM Transactions on Graphics (TOG)**, Volume 23 Issue 1

Publisher: ACM Press

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Wei Li, Arie Kaufman

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Publisher: IEEE Press

Full text available:  [pdf\(4.48 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

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Publisher: ACM Press

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Publisher: IEEE Computer Society

Full text available:  pdf(432.52 KB) Additional Information: [full citation](#), [abstract](#)

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 Tae-Yong Kim, Ulrich Neumann

July 2002 **ACM Transactions on Graphics (TOG) , Proceedings of the 29th annual conference on Computer graphics and interactive techniques SIGGRAPH '02**, Volume 21 Issue 3

Publisher: ACM Press

Full text available:  pdf(9.63 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citings](#), [index terms](#)

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Publisher: ACM Press

Full text available:  pdf(1.27 MB) Additional Information: [full citation](#), [abstract](#), [citings](#), [index terms](#)

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 Alexis Angelidis, Fabrice Neyret

July 2005 **Proceedings of the 2005 ACM SIGGRAPH/Eurographics symposium on Computer animation SCA '05**

Publisher: ACM Press

Full text available:  [pdf\(407.97 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#)


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1 [The elements of nature: interactive and realistic techniques](#)



Oliver Deussen, David S. Ebert, Ron Fedkiw, F. Kenton Musgrave, Przemyslaw Prusinkiewicz, Doug Roble, Jos Stam, Jerry Tessendorf

August 2004 **Proceedings of the conference on SIGGRAPH 2004 course notes GRAPH '04**

Publisher: ACM Press

Full text available: [pdf\(17.65 MB\)](#) Additional Information: [full citation](#), [abstract](#)

This updated course on simulating natural phenomena will cover the latest research and production techniques for simulating most of the elements of nature. The presenters will provide movie production, interactive simulation, and research perspectives on the difficult task of photorealistic modeling, rendering, and animation of natural phenomena. The course offers a nice balance of the latest interactive graphics hardware-based simulation techniques and the latest physics-based simulation techni ...

2 [Level set and PDE methods for computer graphics](#)



David Breen, Ron Fedkiw, Ken Museth, Stanley Osher, Guillermo Sapiro, Ross Whitaker

August 2004 **Proceedings of the conference on SIGGRAPH 2004 course notes GRAPH '04**

Publisher: ACM Press

Full text available: [pdf\(17.07 MB\)](#) Additional Information: [full citation](#), [abstract](#)

Level set methods, an important class of partial differential equation (PDE) methods, define dynamic surfaces implicitly as the level set (iso-surface) of a sampled, evolving nD function. The course begins with preparatory material that introduces the concept of using partial differential equations to solve problems in computer graphics, geometric modeling and computer vision. This will include the structure and behavior of several different types of differential equations, e.g. the level set eq ...

3 [V-buffer: visible volume rendering](#)



Craig Upson, Michael Keeler

June 1988 **ACM SIGGRAPH Computer Graphics , Proceedings of the 15th annual conference on Computer graphics and interactive techniques SIGGRAPH '88**, Volume 22 Issue 4

Publisher: ACM Press

Full text available: [pdf\(1.49 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citings](#), [index terms](#)

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Keywords: isosurface, natural phenomena, ray tracing, volume rendering, voxel

4 GPGPU: general purpose computation on graphics hardware



David Luebke, Mark Harris, Jens Krüger, Tim Purcell, Naga Govindaraju, Ian Buck, Cliff Woolley, Aaron Lefohn

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Publisher: ACM Press

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Charles Loop, Jim Blinn

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Full text available: [pdf\(440.87 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

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Nick Foster, Dimitris Metaxas

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Full text available: [pdf\(5.92 MB\)](#) Additional Information: [full citation](#), [references](#), [citations](#)


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Full text available:  pdf(1.73 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

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Christopher G. Healey, Laura Tateosian, James T. Enns, Mark Remple

January 2004 **ACM Transactions on Graphics (TOG)**, Volume 23 Issue 1

Publisher: ACM Press

Full text available:  pdf(479.81 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

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20 [Computing curricula 2001](#)



September 2001 **Journal on Educational Resources in Computing (JERIC)**

Publisher: ACM Press

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[Visualization and Computer Graphics, IEEE Transactions on](#)
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- ☐ **2. Volume rendering quantification algorithm for reconstruction of CT volume-rendered structures. 1. Cerebral arteriovenous malformations**
Jani, A.B.; Pelizzari, C.A.; Chen, G.T.Y.; Roeske, J.; Hamilton, R.J.; Macdonald, R.L.; Bova, F.; Hoffmann, K.R.; Sweeney, P.A.;
[Medical Imaging, IEEE Transactions on](#)
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- ☐ **3. Robust anisotropic Gaussian fitting for volumetric characterization of Pulmonary nodules in multislice CT**
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- ☐ **4. Computerized detection of malignant tumors on digital mammograms**
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- ☐ **5. Point-based probabilistic surfaces to show surface uncertainty**
Grigoryan, G.; Rheingans, P.;
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Inventor: BLAKE ANDREW (GB); TOYAMA KENTARO (US) Applicant: MICROSOFT CORP (US)

EC: IPC: *G06K9/00; G06K9/34; G06K9/40* (+5)

Publication info: **US2005053303** - 2005-03-10

2 System and method providing subpixel-edge-offset-based determination of opacity

Inventor: BLAKE ANDREW (GB); TOYAMA KENTARO (US) Applicant:

EC: IPC: *G06K9/00; G06K9/34; G06K9/40* (+5)

Publication info: **US2004105594** - 2004-06-03

3 System and method providing subpixel-edge-offset-based determination of opacity

Inventor: BLAKE ANDREW (GB); TOYAMA KENTARO (US) Applicant: MICROSOFT CORP (US)

EC: IPC: *G06K9/00; G06K9/34; G06K9/40* (+4)

Publication info: **US6839463** - 2005-01-04

4 System and method providing mixture-based determination of opacity

Inventor: BLAKE ANDREW (GB); TOYAMA KENTARO (US) Applicant: MICROSOFT CORP (US)

EC: *G06T5/00F; G06T5/30* IPC: *G06T5/00; G06T5/30; G06T5/00* (+4)

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1 RASTER FORM SYNTHESIZING METHOD FOR DIRECT MULTILEVEL FILLING

Inventor: VALDES JACOBO; MARTINEZ EDUARDO

Applicant: DUCTUS INC

EC: G06T11/40; G09G5/28

IPC: **G06T11/40; G09G5/28; G06T11/40** (+3)

Publication info: **JP2001052190** - 2001-02-23

2 Graphics accelerator area fill system

Inventor: NEAVE JOHN WALTER; SALKILD JONATHAN DAVID

Applicant: DU PONT PIXEL SYSTEMS (GB)

EC: G06T17/00

IPC: **G06T17/00; G06T17/00**; (IPC1-7): G06F15/72

Publication info: **GB2252024** - 1992-07-22

3 Generalized clipping in an extended frame buffer

Inventor: HARRINGTON STEVEN J (US)

Applicant: XEROX CORP (US)

EC: G06T15/30

IPC: **G06T15/30; G06T15/10**; (IPC1-7): G06F15/72

Publication info: **US5231695** - 1993-07-27

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